

Application No.: 09/745,925

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application.

**LISTING OF CLAIMS:**

1. (Currently amended) In a printer which has a fast and a slow scan direction and prints an image of pixels on a page, a method of ~~compressing, shifting in the slow scan direction and printing an~~ shifting the image prior to printing, comprising the steps of:

forming the image data into a plurality of independent strips, each of which is a full page in length in the fast scan direction and a number of scan lines in the slow scan direction;

compressing the image data into each of the plurality of independent strips, the plurality of compressed independent strips forming a compressed image; which are a full page in the fast scan dimension, and a number of scan lines in the slow scan direction;

determining an amount to shift the image and a location to shift the image on the page;

shifting the compressed image by either adding or deleting a compressed blank strips corresponding to the amount to shift the image before or after the compressed image in the slow scan direction at the determined location, the compressed image and the compressed blank strip forming a shifted compressed image;

decompressing the shifted compressed image into scanlines of pixels, and  
printing the page.

2. (Original) The process of printing a booklet from a number n of sheets of paper comprising the steps of:

printing two page images on each side of each sheet,

folding the sheets in half to form a booklet having 4n pages, and

trimming the outside edges of all pages to a uniform distance from the fold, and

wherein the method of printing and shifting of Claim 1 is used to shift the pages so that all page images are a uniform distance to the trimmed edge.

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3. (New) A method of progressive image shifting for use in printing a multi-page document, comprising:

for each document page:

forming page image data into a plurality of independent strips, each of which is a full page in length in a fast scan direction and a number of scan lines in a slow scan direction;

compressing each of the plurality of independent strips, the plurality of compressed independent strips forming a compressed page image;

determining an amount and a location to shift the page image on the page;

shifting the compressed page image by inserting a compressed blank strip corresponding to the amount to shift the page image at the determined location on the page;

adjusting locations of the plurality of compressed independent strips according to the location of the compressed blank strip, the compressed page image and the compressed blank strip forming a shifted compressed page image;

decompressing the shifted compressed page image, and  
printing the document.

4. (New) The method of claim 3, wherein printing the document comprises printing two document pages per each sheet of output media, and further comprising:

for each pair of first and second page images:

determining an amount and location of gutter space to be provided between the first page image and the second page image; and

inserting a compressed blank strip corresponding to the determined amount of gutter space at the determined location between the first shifted compressed page image and second shifted compressed page image forming a shifted compressed pair image; and  
decompressing the shifted compressed pair image.